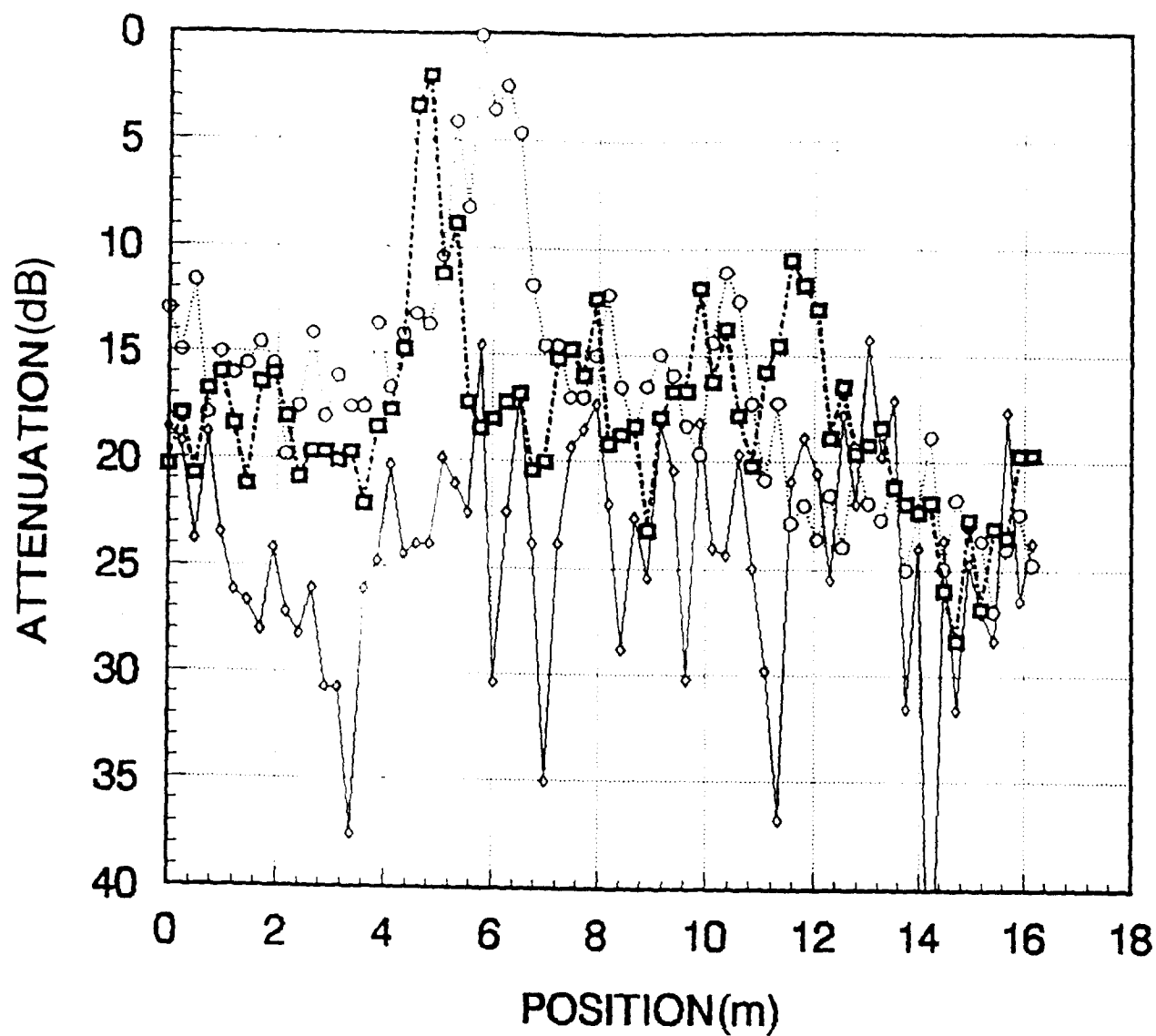


**SRR3A
ATTENUATION**

—◇— 900 MHz
 -○- 11.4 GHz
 -□- 28.8 GHz

Figure A-47. Penetration loss for storeroom path SRR3A.



SRR3B ATTENUATION

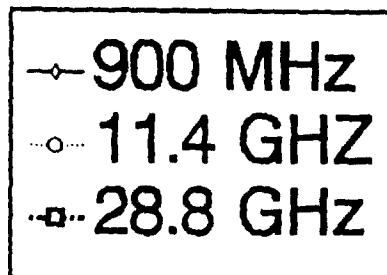
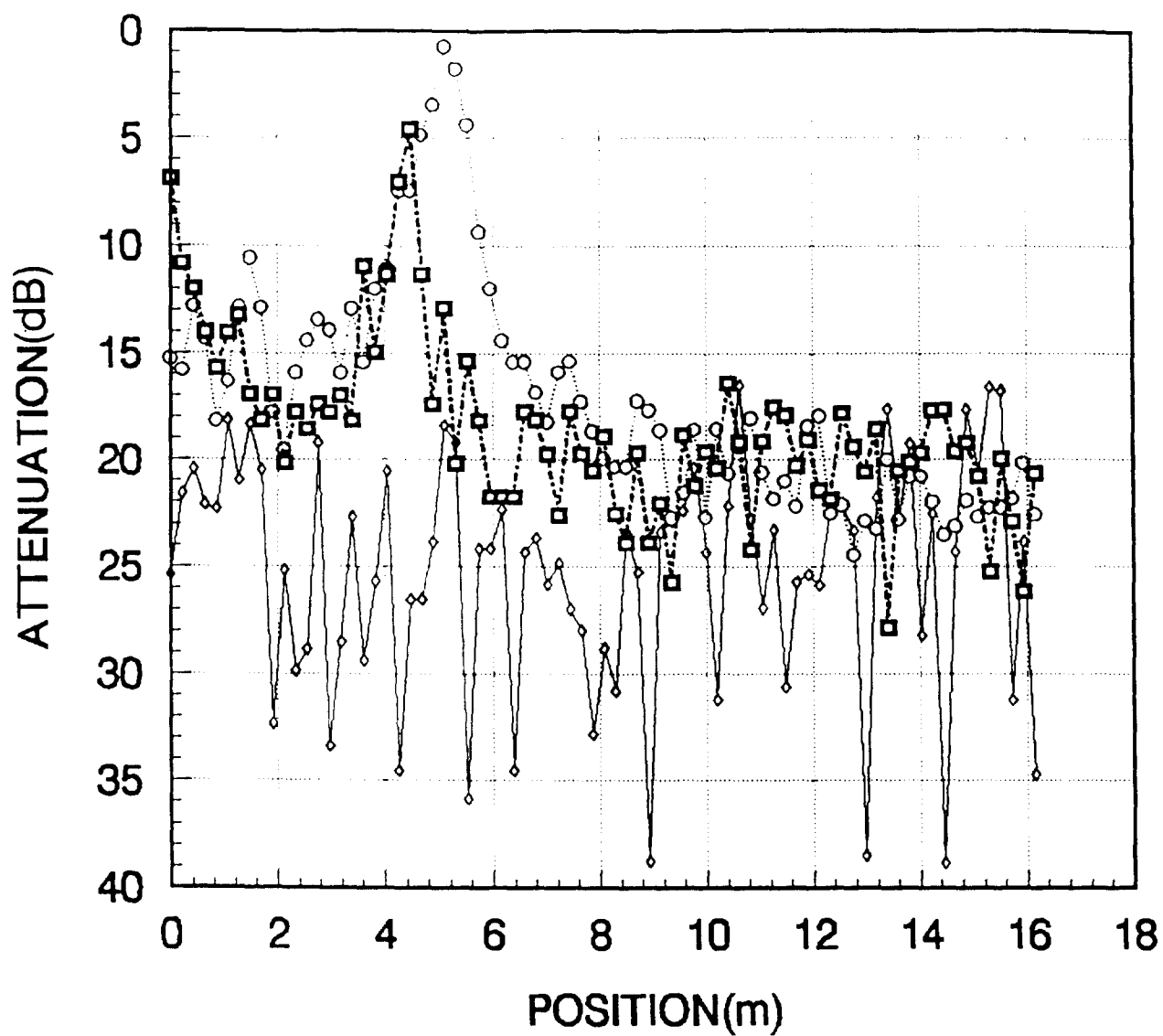


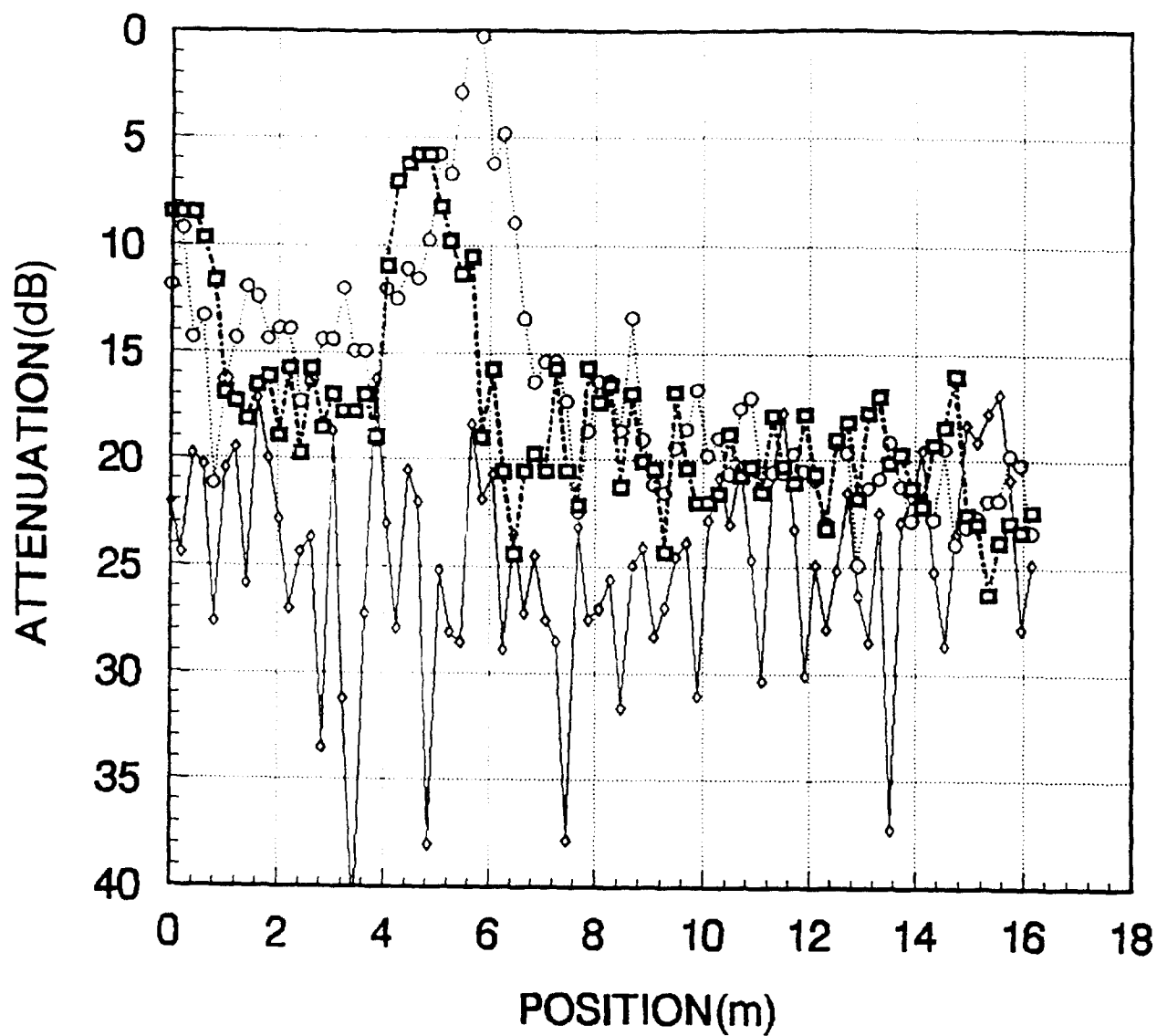
Figure A-48. Penetration loss for storeroom path SRR3B.



SRR4A ATTENUATION

—◇— 900 MHz
 ...○... 11.4 GHz
 -■- 28.8 GHz

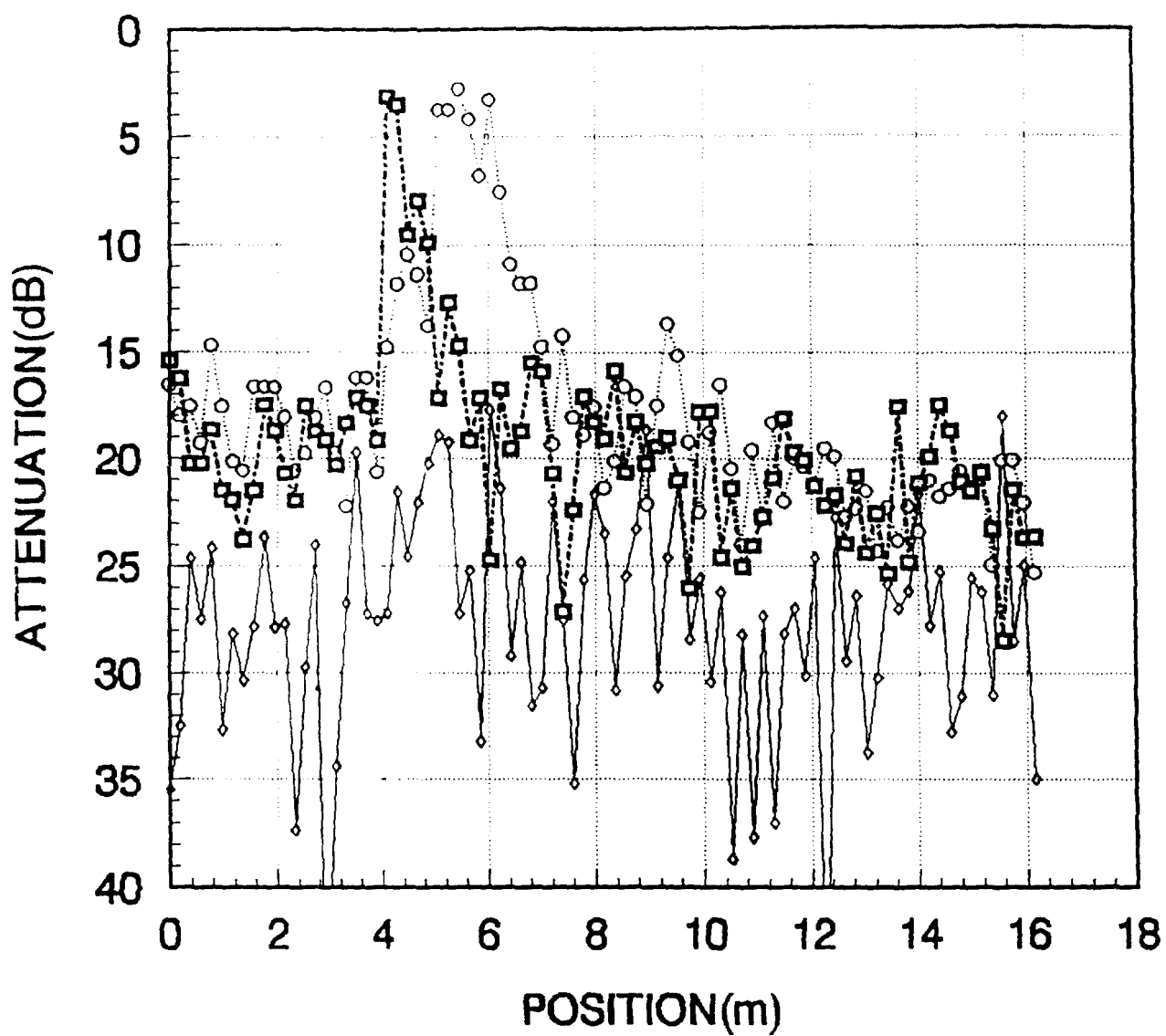
Figure A-49. Penetration loss for storeroom path SRR4A.



SRR4B ATTENUATION

—◇— 900 MHz
○..... 11.4 GHz
 - - - □ - - - 28.8 GHz

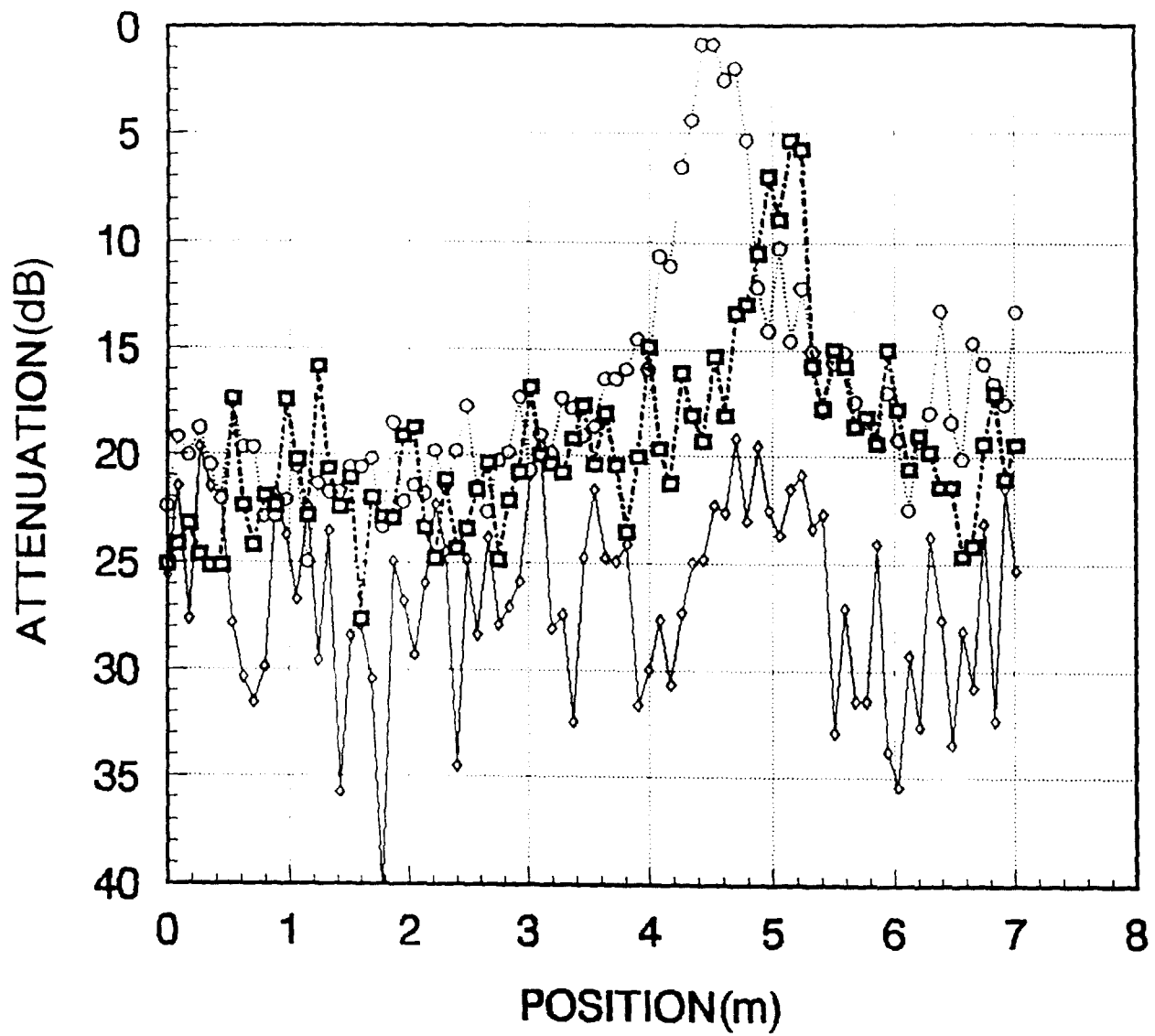
Figure A-50. Penetration loss for storeroom path SRR4B.



SRR5A ATTENUATION

—◇— 900 MHz
 ...○... 11.4 GHz
 -■- 28.8 GHz

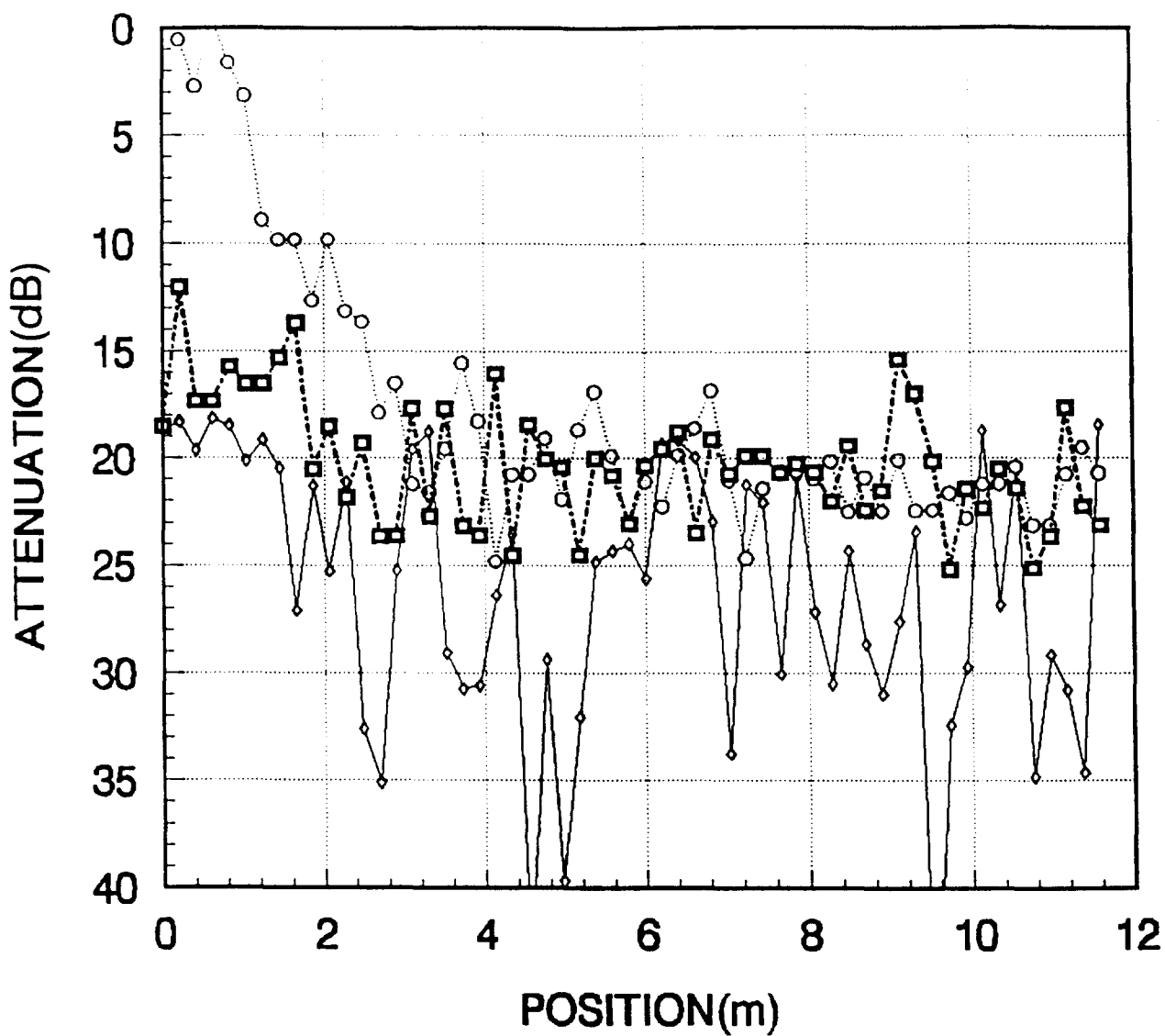
Figure A-51. Penetration loss for storeroom path SRR5A.



SRR5B ATTENUATION

—◇— 900 MHz
 -○- 11.4 GHz
 -■- 28.8 GHz

Figure A-52. Penetration loss for storeroom path SRR5B.



**SRR6A
ATTENUATION**

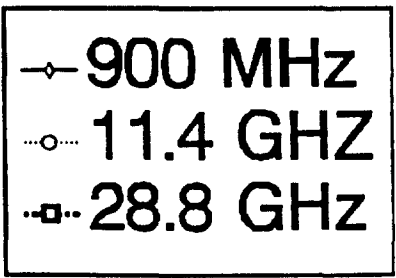
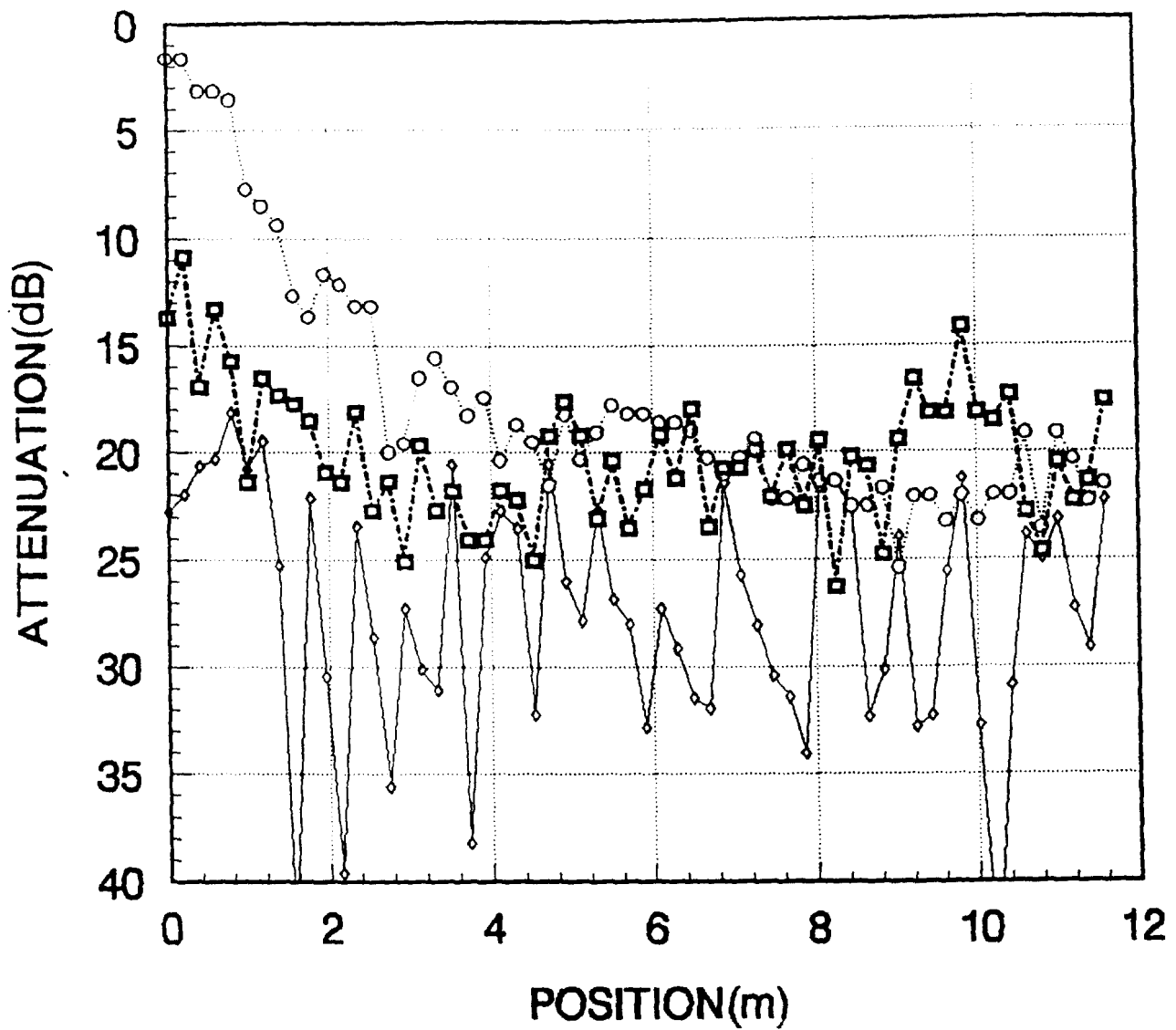


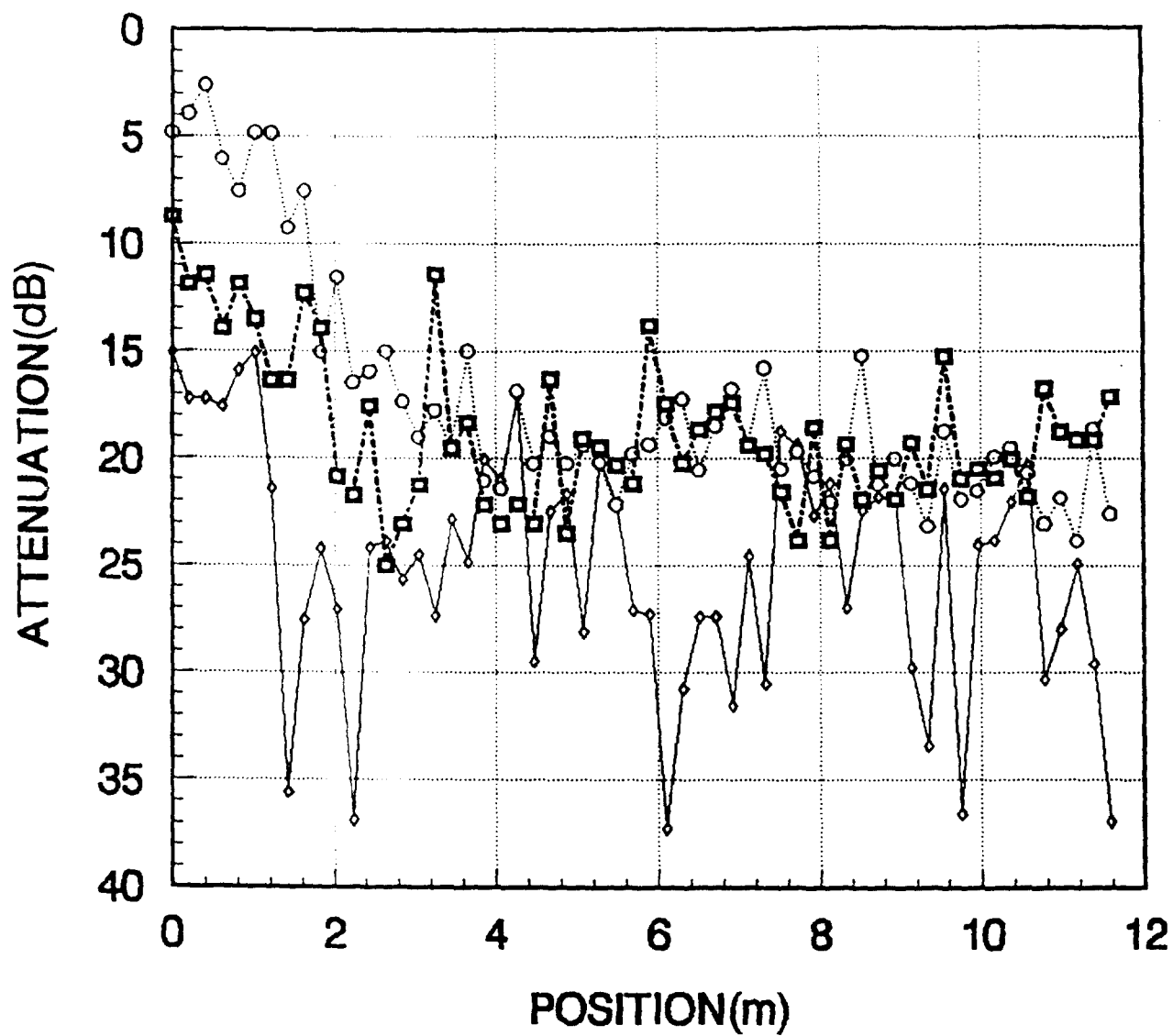
Figure A-53. Penetration loss for storeroom path SRR6A.



SRR6B ATTENUATION

—◇— 900 MHz
 -○- 11.4 GHz
 ·▪· 28.8 GHz

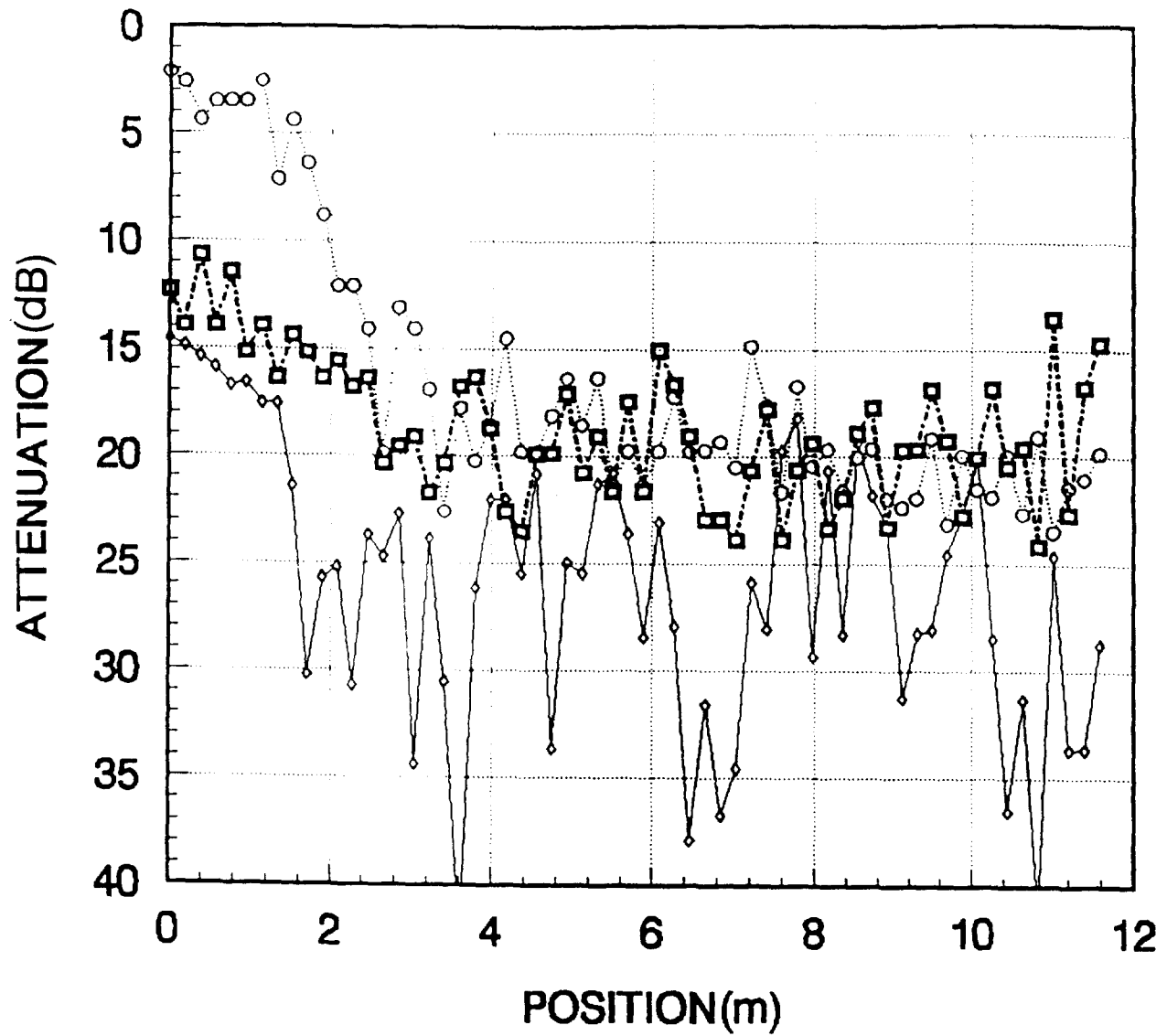
Figure A-54. Penetration loss for storeroom path SRR6B.



SRR7A ATTENUATION

—◇— 900 MHz
 ...○... 11.4 GHz
 - - □ - - 28.8 GHz

Figure A-55. Penetration loss for storeroom path SRR7A.



SRR7B ATTENUATION

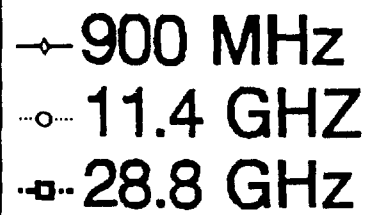
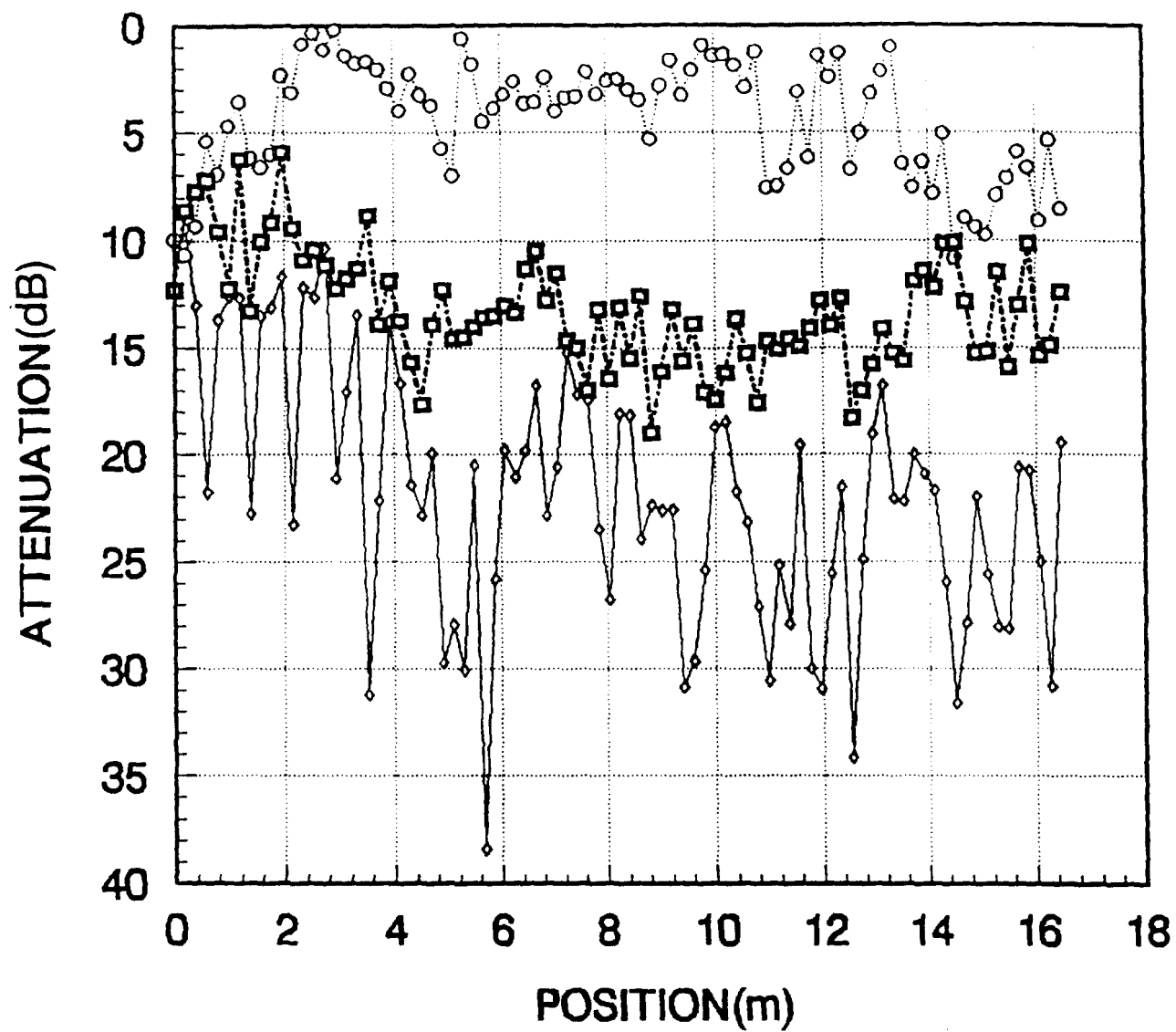


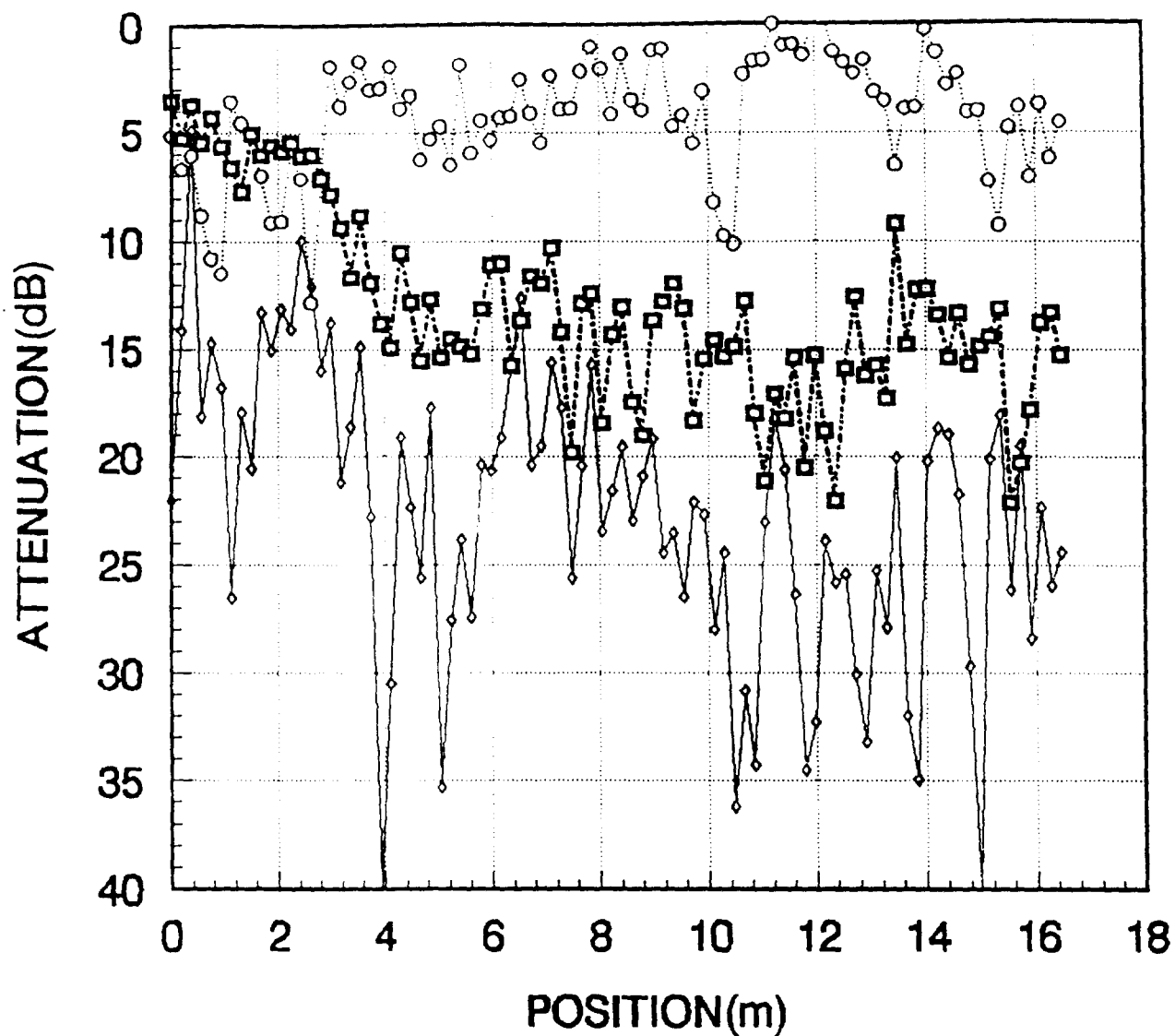
Figure A-56. Penetration loss for storeroom path SRR7B.



SRR8A ATTENUATION

—◇— 900 MHz
○..... 11.4 GHz
 - - - □ - - - 28.8 GHz

Figure A-57. Penetration loss for storeroom path SRR8A.



SRR8B ATTENUATION

—◇— 900 MHz
○..... 11.4 GHz
 - - - □ - - - 28.8 GHz

Figure A-58. Penetration loss for storeroom path SRR8B.

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Building Penetration Measurements From Low-height Base Stations At 912, 1920, and 5990 MHz

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**U.S. DEPARTMENT OF COMMERCE
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Larry Irving, Assistant Secretary
for Communications and Information

September 1995

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GLOSSARY OF TERMS

The following terms are described in order to avoid confusion and make clear the procedures employed during the gathering and analysis of the data presented in this report. They are not necessarily identical to the complete, rigorous or mathematical definitions of the terms.

building penetration loss

The ratio in median signal strength between the measurement obtained inside the building and the reference signal level measured outside the building at street level. This interpretation of building penetration is similar to that given by the International Telecommunication Union-Radiocommunications (ITU-R), formerly CCIR [1].

high-rise building

A multistory office building in an urban environment.

line-of-sight transmission path

A straight line path between the transmitter and building under test which is not obstructed by any buildings.

median value

The median value of the path loss measurements in one area, such as one room within a building or one corner of a high-rise building.

mean value

The average value of the medians calculated for all rooms in a residence and all corners for each level of a high-rise building.

non-line-of-sight transmission path

A straight line path between the transmitter and building under test that is obstructed by at least one building.

path loss

Attenuation undergone by an electromagnetic wave in transit between a transmitter and receiver. In this report, path loss refers to the median loss experienced, calculated from the received signal level.

reference signal level

The median of the line-of-sight field intensity measured at street level outside the wall of the building under test closest to the transmitter. If the transmitter is nearest to a corner of the building under test, we use the average value of the measurement of the two walls that make up that corner.

residential building

A single family house in a suburban area.